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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/492,521

01/27/2000

Hisao Hayashi

KN-43-US

9984

7590

07/02/2004

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EXAMINER

WORKU, NEGUSSIE

ART UNIT

PAPER NUMBER

2626

DATE MAILED: 07/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/492,521

Applicant(s)

HAYASHI, HISAO

Examiner

Negussie Worku

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-12,14-18 and 20-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-6,8-12,14-18 and 20-23 is/are allowed.
- 6) ☒ Claim(s) 1 and 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 2-6, 8-12, 14-18 and 20-23 are allowed. Applicant's arguments with respect to claim 1 and 24, have been considered, but are moot in view of the new ground(s) of rejection. And this office action is non-final.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Lin (USP 6,252,684).

With respect to claim 1, Lin discloses an image scanner (as shown in fig 2) for use in reading image information, (scanner 33 of fig 2, used to read image information) comprising: conveying means (paper feeder 4 of fig 2) for conveying a manuscript including said image information to be read on a predetermined reading position (the document transported by paper feeder 4 of fig 1, being positioned on the scanning

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platform 32 of fig 2) of a conveying route, see (col.3, line 23-27); a first light source (upper light source 44 of fig 2) which is located at one side of said conveying route and which emits light onto said predetermined reading position from said one side, see (col.3, lines 26-28); a second light source (the lower light source 33 of fig 2) which is located at another side of said conveying route with being opposite to said first light source and which emits light onto said predetermined reading position from said another side opposite to said one side, see (col.4, lines 57-65); image information reading means (scanner 33 of fig 2) for reading said image information included in said manuscript at said predetermined reading position on said conveying route by light electricity conversion, see (col.4, lines 55-65); and light source switching control means (46 of fig 2) for controlling light source switching between said first and said second light sources to read said image information included in said manuscript, see (col.3, lines 29-31) said light source switching control means (46 of fig 2) rendering only said first light source ON when said image information is defined by a transmitting light transmitting through said manuscript, see (col.4, lines 57-65) said light source switching control means (controller 46 of fig 2) rendering only said second light source ON when said image information is defined by a reflected light reflected by said manuscript, see (col.4, lines 56-65).

With respect to claim 24, Lin discloses the scanner (as shown in fig 2), wherein said predetermined reading position is stationary (as shown in fig 2, transparent or opaque scanning platform 32 of fig 1, is stationary, see col.3, lines 20-23).

Allowable Subject Matter

4. The following is a statement of reasons for the indication of allowable subject matter: Claims 2-6, 8-12, 14-18 and 20-23 are allowed for the reasons stated below.

With respect to claim 2-6, the prior art does not teach or disclose an image scanner for use in reading image information, comprising: a driving side conveying roll for conveying a manuscript including said image information to be read; a driven side conveying roll which is located above said driving side conveying roll and which rotates by rolling contact with said driving side conveying roll; a manuscript sensor for detecting said manuscript when a head of said manuscript arrives at a position near the rolling-contact position between said driving side conveying roll and said driven side conveying roll; conveying roll driving means for starting a rotation of said driving side conveying roll when said manuscript sensor has detected an arrival of said head of said manuscript; light-electricity conversion means for carrying out light-electricity conversion of said image information per one line in a main-scanning direction of said manuscript from a side of one surface of said manuscript at a reading position on a conveying route when said driving side conveying roll is started to rotate by said conveying roll driving means and said manuscript is thereby started to move toward the sub-scanning direction between said driving side and said driven side conveying rolls, said reading position existing downstream of said conveying route from the rolling-contact position by

a predetermined distance; a first light source for emitting light onto said reading position from a side of another surface of said manuscript opposite to said one surface thereof; a second light source for emitting light onto said reading position from a side of the same surface of said manuscript as said one surface thereof; and light source switching control means for selectively rendering either said first light source or said second light source ON to read said image information included in said manuscript, dependent on whether said image information is defined by a reflected light reflected by said manuscript or by a transmitting light transmitting through said manuscript.

With respect to claims 8-12, the prior art does not disclose or teach an image scanner for use in reading image information, comprising: a driving side conveying roll for conveying a manuscript including said image information to be read past a stationary reading position"; a driven side conveying roll which is located above said driving side conveying roll and which rotates by rolling-contact with said driving side conveying roll; a manuscript sensor for detecting said manuscript when a head of said manuscript arrives at a position near the rolling contact position between said driving said conveying roll and said driven side conveying roll; conveying roll driving means for starting a rotation of said driving side conveying roll wherein said manuscript sensor has detected an arrival of said head of said manuscript; light-electricity conversion means for carrying out light-electricity conversion of said image information per one line in a main-scanning direction of said manuscript from a side of one surface of said

manuscript at said stationary reading position on a conveying route when said driving side conveying roll is started to rotate by said conveying roll driving means and said manuscript is thereby started to move toward the sub-scanning direction between said driving side and said driven side conveying rolls, said stationary reading position existing downstream of said conveying route from the rolling-contact position by a predetermined distance; a first light source for emitting light onto said stationary reading position from a side of another surface of said manuscript opposite to said one surface thereof; a second light source for emitting light onto said stationary reading position from a side of the same surface of said manuscript as said one surface thereof; light source selection input means for inputting whether either said first light a second light source should be selected, dependent on whether said image defined by a reflected light reflected by said manuscript or by a transmitting light transmitting through said manuscript, and light source switching control means for selectively rendering either said first light source or said second light source ON to read said image information included in said manuscript, responsive to a result of selection by said light source selection input means.

With respect to claims 14-17, 18 and 20, the prior art does not teach or disclose an image scanner for use in reading image information, comprising: a driving side conveying roll for conveying a manuscript including said image information to be read; a driven side conveying roll which is located above said driving side conveying roll and

which rotates by rolling-contact with said driving side conveying roll; a manuscript sensor for detecting said manuscript when a head of said manuscript arrives at a position near the rolling-contact position between said driving side conveying roll and said driven side conveying roll; conveying roll driving means, for starting a rotation of said driving side conveying roll when said manuscript sensor has detected an arrival of said head of said manuscript; light-electricity conversion means for carrying out light-electricity conversion means for carrying out light-electricity conversion of said image information per one line in a main scanning direction of said manuscript from a side of one surface of said manuscript at a reading position on a conveying route: when said driving side conveying roll is started to rotate by said conveying roll driving means and said manuscript is thereby started to move toward the sub-scanning direction between said driving side and said driven side conveying rolls, said reading position existing downstream of said conveying route from the rolling contact position by a predetermined distance; a first light source for emitting light onto said reading position from a side of another surface of said manuscript opposite to said one surface thereof; a second light source for emitting light onto said reading position from a side of the same surface of said manuscript as said one surface thereof; and manuscript type judging means which respectively renders said first and said second light sources exclusively ON on a condition that said manuscript is existing at said reading position to compare respective signal levels after conversion by light-electricity conversion means, and which thereby judge whether said manuscript is such a type of manuscript as read by a

transmitting light transmitting through said manuscript or such an another type of manuscript as read by a reflected light reflected by said manuscript; and light source switching control means for selectively rendering either said first light source or said second light source ON to read said image information included in said manuscript, responsive to a result of, Judgement by said manuscript type judging means.

With respect to claim 21, the prior art does not teach or disclose an image scanner, comprising: a driving side conveying roll that conveys a manuscript; a driven side conveying roll located above said driving side conveying roll, a manuscript sensor that detects when said manuscript arrives at a position near the rolling-contact position between said, driving side conveying roll and said driven side conveying roll; a conveying roll driver that rotates said driving side conveying roll when said manuscript sensor detects an arrival of said head of said manuscript; a light-electricity converter that converts light including image information to electricity in a main-scanning direction of said manuscript from a surface of said manuscript when said driving conveying roll rotates to move said manuscript toward a sub-scanning direction between said driving side and said driven side conveying rolls, a reading position being downstream in a conveying route from the rolling-contact position by a predetermined distance; a first light source that emits light onto another surface of said manuscript; a second light source that emits light onto said surface of said manuscript; a light source switching controller that selectively renders either said first light source or said second light source

ON to read said image information based on whether said image information is defined by light reflected by said manuscript or by light transmitting through said manuscript; and an encoder which generates a pulse every time said driven side conveying roll makes a predetermined number of rotations, and wherein said image scanner reads one line of said image information in synchronization with said pulse, said reading of said image information starting when said pulse is generated, said reading of said image information terminating when a predetermined time has passed after said pulse.

With respect to claim 22, the prior art does not disclose or teach an image scanner, comprising: a driving side conveying roll that conveys a manuscript including an image; a driven side conveying roll which is located above said driving side conveying roll and which rotates with said driving side conveying roll; a manuscript sensor that detects said manuscript when a head of said manuscript arrives at a position near a rolling-contact position between said driving side conveying roll and said driven side conveying roll; a conveying roll driver that rotates said driving side conveying roll when said manuscript sensor detects said manuscript; a light-electricity converter that converts light including image information to electricity in a main-scanning direction of said manuscript from a side of said manuscript when said driving side conveying roll rotates to move said manuscript in the sub-scanning direction between said driving side and said driven side conveying rolls, a reading position being downstream in a conveying route from the rolling-contact position by a predetermined

distance; a first light source that emits light onto another surface of said manuscript; a second light source that emits light onto said surface of said manuscript; a light source selection in putter that inputs whether said first light source or said second light source is selected based upon whether said image information is defined by light reflected by said manuscript or by light transmitting through said manuscript; a light source switching controller that selectively renders either said first light source or said second light source ON to read said image information in response to a result of said input from said light source selection in putter; and an encoder which generates a pulse every time said driven side conveying roll makes a predetermined number of rotations, and wherein said image scanner reads one line of said image information in synchronization with said pulse, said reading of said image information starting when said pulse is generated, said reading of said image information terminating when a predetermined time has passed after said pulse.

With respect to claim 23, the prior art does not disclose or teach an image scanner, comprising: a driving side conveying roll that conveys a manuscript including an image; a driven side conveying roll which is located above said driving side conveying roll and which rotates with said driving side conveying roll; a manuscript sensor that detects said manuscript when a head of said manuscript arrives at a position near a rolling-contact position between said driving side conveying roll and said driven side conveying roll; a conveying roll driver that rotates said driving side

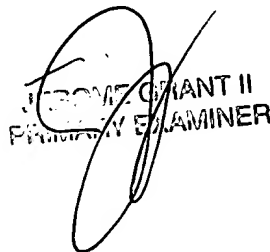
conveying roll when said manuscript sensor detects said manuscript; a light-electricity converter that converts light including image information to electricity in a main-scanning direction of said manuscript from a side of said manuscript when said driving side conveying roll rotates to move said manuscript in the sub-scanning direction between said driving side and said driven side conveying rolls, a reading position being downstream in a conveying route from the rolling-contact position by a predetermined distance; a first light source that emits light onto another surface of said manuscript; a second light source that emits light onto said surface of said manuscript; a manuscript type judger which respectively renders said first and said second light sources exclusively ON based on whether said manuscript is read by light transmitting through said manuscript or read by light reflected by said manuscript based upon a comparison of respective signal levels from said light--electricity converter; a light source switching controller that selectively renders either said first light source or said second light source ON in response to said judgment by said manuscript type judger; and an encoder which generates a pulse every time said driven side conveying roll makes a predetermined number of rotations, and wherein said image scanner reads one line of said image information in synchronization with said pulse, said reading of said image information starting when said pulse is generated, said reading of said image information terminating when a predetermined time has passed after said pulse.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Negussie Worku whose telephone number is 305-5441. The examiner can normally be reached on 7am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached on 703-305-4863. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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